

Claims

What is claimed is:

1. A remote control system comprising:

a terminal device having a control program;

5 a server connected to said terminal device,
for transmitting control data and for registering
three-dimensional model data concerning said
terminal device; and

10 a client connected to said server, for
receiving said three-dimensional model data,
wherein said client performs an additional
operation upon the receipt of specific
three-dimensional model data from said server,
and transmits, to said server, update data for
15 changing a three-dimensional model, which are
obtained by said additional operation, and
wherein said server transmits, to said terminal
device, said control data based on said update
data for a three-dimensional model received from
20 said client.

2. The remote control system according to claim 1,
wherein, based on said update data for a three-dimensional
model received from said client, said server transmits
operation control data to said terminal device, and said
5 control program of said terminal device interprets said
operation control data for said operation of said terminal
device, and transmits, to said server, control data for
reflecting said operating results.

3. The remote control system according to claim 2,
10 wherein, based on said control data received from said
terminal device, said server adjusts said three-dimensional
model data to reflect the current state of said terminal
device, and transmits the resultant three-dimensional model
data to said client.

4. A server-client system comprising:

a server, in which are stored
three-dimensional model data, consisting of a
Java program file concerning a connected terminal
device;

a first client connected to said server via
a network, for calling for and for displaying
specific three-dimensional model data included in
said three-dimensional model data that are stored
in said server; and

a second client connected to said server via
said network, for employing a web browser to
designate a URL for said specific three-
dimensional model data that are called for by
said first client, and for downloading and
displaying said specific three-dimensional model
data received from said server so as to share
said specific three-dimensional model data with
said first client.

5. The server-client system according to claim 4,
wherein said three-dimensional model data, which consists
of said Java program file stored in said server, includes a
program for controlling said terminal device, and said
first and said second clients display the values of said
three-dimensional model data to reflect the current control
state of said terminal device.

6. The server-client system according to claim 4, wherein one of said first and said second clients is a computer at a customer support center that supports said terminal device.

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7. A control server for a terminal device comprising:

a terminal device function control program,
for exchanging control data for a terminal device
connected to an internal network and for
controlling the functions of said terminal
device;

three-dimensional model data, including
geometrical data for said terminal device and
device operating data that are received by said
terminal device function control program and
reflect the operating results of said terminal
device; and

a module, for recording an operation
performed by a user as an operation event and for
replaying, as needed, said operation event.

8. The control server according to claim 7, wherein
said module employs recording/replaying software to record,
as a VRML operation event, an operation performed by a user
that is generated via a VRML browser, and replays and
displays said VRML operation event via said VRML browser.

9. The control server according to claim 8, wherein
an operation performed by said user is represented by the
performance of an operation based on VRML contents, which
are three-dimensional model data written for said VRML
browser using a VRML format.

10. The control server according to claim 7, further comprising:

a client connected to an external network;
and

5 a module for exchanging an operation event
with said client via said external network.

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11. A terminal device control method whereby a client exercises remote control of a terminal device comprising the steps of:

5 designating a web browser at said client to designate a URL corresponding to said terminal device, and downloading three-dimensional model data;

10 rendering said three-dimensional model data that are downloaded, and reading a control program that is correlated through the designation of said URL; and

15 transmitting operation control data to said terminal device in response to an operation where a user performs with said three-dimensional model that is rendered by said client.

12. The terminal device control method according to claim 11, wherein said step of transmitting said operation control data to said terminal device includes the steps of:

20 transmitting, to a server, an update value of said three-dimensional model data obtained by said client; and

 employing said update value to transmit said operation control data from said server to said terminal device.

13. The terminal device control method according to claim 11, further comprising the steps of:

5 transmitting control data for reflecting operating results from said terminal device to said server; and

10 reflecting said control data to said three-dimensional model data, and transmitting the resultant three-dimensional model data from said server to said client.

14. A terminal device sharing method, for sharing among a plurality of clients information concerning a terminal device, comprising the steps of:

5 employing a web browser at a first client to designate a URL corresponding to said terminal device, and downloading model data;

 rendering said model data that are downloaded;

10 preparing shared data by operating said model data that are rendered by said first client, and transmitting said data used in common;

15 employing a web browser of a second client to designate a URL corresponding to said terminal device, and downloading model data; and

 receiving said data used in common from said first client and employing said data used in common to update said values of said model data.

15. Storage media on which a computer stores a computer-readable program that permits said computer to perform:

5 a process of calling for three-dimensional model data concerning a terminal device connected to a network;

a process of rendering said three-dimensional model data that has been called for;

10 a process of calling for a control file associated with said three-dimensional model data; and

15 a process of receiving control data from said terminal device and of reflecting the received control data to said three-dimensional model data.

20 16. Storage media according to claim 15, wherein said computer-readable program further comprises: a process of receiving updated values of three-dimensional model data from a client connected to an external network, and of transmitting said control data to said terminal device.

17. Storage media on which a computer stores a computer-executable program that permits said computer to perform:

5 a process of calling for the transmission, via an external network, of three-dimensional model data concerning a terminal device;

a process of rendering said three-dimensional model data that is called for;

10 a process of calling for a control file associated with said three-dimensional model data;

a process of reflecting said control file to values of said three-dimensional model data; and

15 a process of changing the values of said three-dimensional model data based on the operation for said three-dimensional model.

18. A program transmission apparatus comprising:

storage means for storing a program that
executes a process of calling for the
transmission, via an external network, of
5 three-dimensional model data concerning a
terminal device, a process of rendering said
three-dimensional model data that has been called
for, a process of calling for a control file
associated with said three-dimensional model
10 data, a process of reflecting the values in said
control file to the values of said
three-dimensional model data, and a process of
changing the values of said three-dimensional
model data based an operation performed by a user
15 for said three-dimensional model; and

transmission means for reading said program
from said storage means and for transmitting said
program to an external computer.

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